

WHAT IS CLAIMED IS:

1. A system for identifying users of a plurality of computers within a communications network, comprising:

5 a database storing directory information for a plurality of users authorized to use the plurality of computers within the communications network;

a name discovery apparatus having at least one connection to a primary switch in the communications network for capturing inbound and outbound electronic mail traffic; and

10 a server, connected to said name discovery apparatus and having access to said database via the communications network, said server having a server process capable of joining said inbound and outbound electronic mail traffic captured by said name discovery apparatus and said directory information stored in said database, thereby identifying which of said plurality of users is using which of the plurality of computers.

15 2. The system of Claim 1, wherein the communications network is a local area network.

3. The system of Claim 2, wherein said local area network is an Ethernet network.

20 4. The system of Claim 1, wherein the communications network is a wide area network.

5. The system of Claim 1, further comprising:
a central repository, accessible by said name discovery apparatus and said Web server, for storing said inbound and outbound electronic mail traffic captured by said name discovery apparatus.
- 5 6. The system of Claim 1, wherein said database is an ITU-T X.500 formatted database.
7. The system of Claim 1, wherein said database contains at least one of the following fields of data relating to said plurality of users: (i) First Name; (ii) Last Name; (iii) Middle Initial; (iv) Nick Names; (v) Name Aliases; (vi) Building;
10 (vii) Room; (viii) Permanent E-mail; (ix) Temporary E-mail; (x) User Name; (xi) E-mail Address; and (xii) Affiliation/Organization.
8. The system of Claim 1, wherein said server process is a Web server process capable of responding to browser-based queries to identify which of said plurality of users is using which of the plurality of computers.
- 15 9. The system of Claim 1, wherein said inbound and outbound electronic mail traffic captured by said name discovery apparatus includes at least one of the following: (i) POP electronic mail traffic; (ii) IMAP electronic mail traffic; and (iii) SMTP electronic mail traffic.
10. A method for identifying users of a plurality of computers within a
20 communications network, the method comprising the steps of:
capturing inbound and outbound electronic mail traffic from at least one primary switch in the communications network;
extracting Internet Protocol addresses and electronic mail addresses from said

captured inbound and outbound electronic mail traffic;

accessing a database of directory information for a plurality of users authorized to use the plurality of computers within the communications network, said database comprising a plurality of electronic mail addresses, each corresponding to one of said plurality of users; and

joining said extracted electronic mail addresses with said plurality of electronic mail addresses stored in said database, thereby mapping a subset of said extracted Internet Protocol addresses to a subset of said plurality of users.

11. The method of Claim 10, further comprising the step of:
storing said extracted Internet Protocol addresses and electronic mail addresses in a central repository.

12. The method of Claim 11, further comprising the steps of:
accessing said central repository; and
producing a data file, on a pre-determined time interval, said data file containing information on which of said plurality of users used which of the plurality of computers during said pre-determined time interval.

13. The method of Claim 10, wherein said extracting step comprises the step of:
using pattern matching based upon a known electronic mail protocol to extract said Internet Protocol addresses and said electronic mail addresses from said captured inbound and outbound electronic mail traffic.

14. The method of Claim 13, wherein said known electronic mail protocol is one of the following protocols: (i) POP; (ii) IMAP; and (iii) SMTP.

15. The method of Claim 10, wherein the communications network is a local area network.

16. The method of Claim 15, wherein said local area network is an Ethernet network.

5 17. The method of Claim 10, wherein the communications network is a wide area network.

18. The method of Claim 10, wherein said database is an ITU-T X.500 formatted database.

19. The method of Claim 10, further comprising the step of:
10 receiving, via the communications network, a query to identify a user of one of the plurality of computers within the communications network, said query including an Internet Protocol address; and

responding to said query using said mapping of said subset of said extracted Internet Protocol addresses to said subset of said plurality of users and using said
15 received Internet Protocol address.

20. The method of Claim 10, wherein said database further comprises at least one of the following fields of data for each of said plurality of users: (i) First Name; (ii) Last Name; (iii) Middle Initial; (iii) Nick Names; (iv) Name Aliases; (v) Building; (vi) Room; (vii) User Name; and (viii) Affiliation/Organization.

20 21. The method of Claim 20, further comprising the step of:
receiving, via the communications network, a query to identify a user of one of the plurality of computers within the communications network, said query including at least one of said fields of data; and

responding to said query using said mapping of said subset of said extracted Internet Protocol addresses to said subset of said plurality of users and using said received at least one of said fields of data.

22. A computer program product comprising a computer usable medium
5 having control logic stored therein for causing a computer to identify users of a plurality of terminals within a communications network, said control logic comprising:

first computer readable program code means for causing the computer to capture inbound and outbound electronic mail traffic from at least one primary switch
10 in the communications network;

second computer readable program code means for causing the computer to extract Internet Protocol addresses and electronic mail addresses from said captured inbound and outbound electronic mail traffic;

third computer readable program code means for causing the computer to
15 access a database of directory information for a plurality of users authorized to use the plurality of terminals within the communications network, said database comprising a plurality of electronic mail addresses, each corresponding to one of said plurality of users; and

fourth computer readable program code means for causing the computer to join
20 said extracted electronic mail addresses with said plurality of electronic mail addresses stored in said database, thereby mapping a subset of said extracted Internet Protocol addresses to a subset of said plurality of users.

23. The computer program product of Claim 22, further comprising:

fifth computer readable program code means for causing the computer to store said extracted Internet Protocol addresses and electronic mail addresses in a central repository.

5 24. The computer program product of Claim 23, further comprising:

sixth computer readable program code means for causing the computer to access said central repository; and

seventh computer readable program code means for causing the computer to create a data file, on a pre-determined time interval, said data file containing
10 information on which of said plurality of users used which of the plurality of terminals during said pre-determined time interval.

25. The computer program product of Claim 22, wherein said second computer readable program code means comprises:

fifth computer readable program code means for causing the computer to
15 perform pattern matching based upon a known electronic mail protocol to extract said Internet Protocol addresses and said electronic mail addresses from said captured inbound and outbound electronic mail traffic.

26. The computer program product of Claim 25, wherein said known electronic mail protocol is one of the following protocols: (i) POP; (ii) IMAP; and (iii)
20 SMTP.

27. The computer program product of Claim 22, wherein said database is an ITU-T X.500 formatted database.

28. The computer program product of Claim 22, further comprising:

fifth computer readable program code means for causing the computer to receive, via the communications network, a query to identify a user of one of the plurality of terminals within the communications network, said query including an Internet Protocol address; and

sixth computer readable program code means for causing the computer to respond to said query using said mapping of said subset of said extracted Internet Protocol addresses to said subset of said plurality of users and using said received Internet Protocol address.

29. The computer program product of Claim 22, wherein said database further comprises at least one of the following fields of data for each of said plurality of users: (i) First Name; (ii) Last Name; (iii) Middle Initial; (iii) Nick Names; (iv) Name Aliases; (v) Building; (vi) Room; (vii) User Name; and (viii) Affiliation/Organization.

30. The computer program product of Claim 29, further comprising:

fifth computer readable program code means for causing the computer to receive, via the communications network, a query to identify a user of one of the plurality of terminals within the communications network, said query including at least one of said fields of data; and

sixth computer readable program code means for causing the computer to respond to said query using said mapping of said subset of said extracted Internet Protocol addresses to said subset of said plurality of users and using said received at least one of said fields of data.